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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,810	06/27/2001	Bernard A. King-Smith	POU920000119US1	3513

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EXAMINER

SORRELL, ERON J

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/892,810

Applicant(s)

KING-SMITH ET AL.

Examiner

Eron J Sorrell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Referring to claim 16, line 4 of the claim reads, inter alia, "wherein the socket is local to **the node** (emphasis added)". It is unclear to the Examiner which node is being referenced as **the node** (emphasis added) since two different nodes are mentioned in the preceding portion of the claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,3-12,21,23-32,43,45-54 are rejected under 35

U.S.C. 102(b) as being anticipated by the paper "Automatic TCP Buffer Tuning" by Mathis et al. (hereinafter "Mathis").

3. Referring to method claim 1, system claim 21, and computer readable medium claim 43, Mathis teaches a method and system of tuning sockets of a computing environment, the method and system comprising:

means for dynamically determining information relating to a current configuration of the computing environment (see 6<sup>th</sup> paragraph of section 1); and

means for setting one or more parameters of a socket of the computing environment based on the dynamically determined information (see 6<sup>th</sup> paragraph of section 1; Note the tuning of buffer sizes is the parameter setting).

4. Referring to method claims 3 and 4, system claims 23 and 24, and computer readable medium claims 45 and 46, Mathis teaches the one or more parameters comprise a size of a send buffer of the socket (see first and second paragraph of section

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2.2) and the size of the receive buffer of the socket (see 3<sup>rd</sup> paragraph of section 2.1).

5. Referring to claim method claim 5, system claim 25, and computer readable medium claim 47, Mathis teaches the dynamically determining comprises determining a maximum amount of data that can be sent by the socket based on the current configuration (see 3<sup>rd</sup> paragraph of section 2.1).

6. Referring to method claims 6 and 8, system claim 26 and 28, and computer readable medium claim 48 and 50, Mathis teaches the information comprises information related to the network of the computing environment coupled to the socket and information relating to the socket (see 5<sup>th</sup> paragraph of section 1; Note the available memory is information related to the socket).

7. Referring to claim 7, system claim 27, and computer readable medium claim 49, Mathis teaches the information related to the network comprises at least one of the network adapter maximum segment size and the adapter transfer limit (see paragraph 4 of section 2.1; Note the system maximum buffer size is the maximum segment size).

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8. Referring to method claim 9, system claim 29, and computer readable claim 51, Mathis teaches the information comprises at least one of a current socket send buffer size, a current socket receive buffer size, and a current maximum buffer limit (i.e. memory availability) (see 5<sup>th</sup> paragraph of section 1).

9. Referring to method claim 10, system claim 30, and computer readable medium claim 52, Mathis teaches the information comprises the number of remote sockets to be opened (see paragraph 2 of section 1.3).

10. Referring to method claim 11, system claim 31, and computer readable medium claim 53, Mathis teaches the computing environment includes an indeterminate number of sockets (see 4<sup>th</sup> paragraph of section 1; Note Examiner is relying on applicant's definition of "indeterminate" found in paragraph 0017 on page 5 of the instant application.)

11. Referring to method claim 12, system claim 32, and computer readable medium claim 54, Mathis teaches the computing environment includes a plurality of networks (see figure 2).

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***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 2,20,22,40-42,44, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mathis in view of Gupta et al. (U.S. Patent No. 6,405,252 hereinafter "Gupta").

14. Referring to method claim 2, system claim 22, and computer readable medium claim 44, Mathis fails to teach that the dynamically determining is performed in response to opening the socket.

Gupta teaches a method and system wherein network configuration information is dynamically determined and is performed in response to opening the socket (see lines 49-58 of column 14).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the method and system of Mathis with the teachings of Gupta such

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that the dynamically determining is performed in response to opening the socket because this is when the system available memory is changed.

15. Referring to method claim 20, see discussion of claims 1,2,6, and 8, as claim 20 is just a combination of those claims.

16. Referring to system claims 40-42, see discussion of claim 21, 22,26, and 28, as claims 40-42 are just combinations of those claims.

17. Referring to claim 62, see discussion of claim 43,44,48, and 50, as claim 62 is just a combination of those claims.

18. Claims 13-15, 33-35, and 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mathis in view of Eckley et al. (U.S. Patent No. 6,163,797 hereinafter "Eckley").

19. Referring to method claim 13, system claim 33, and computer readable claim 55, Mathis fails to teach the setting is performed by a node of the computing environment initiating a socket connection with another node of the computing



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environment, and wherein the socket is local to the initiating node.

Eckley teaches, in an analogous method and system, that the setting is performed by a node of the computing environment initiating a socket connection with another node of the computing environment, and wherein the socket is local to the initiating node (see lines 58 of column 8 to line 10 of column 9).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system and method of Mathis with the teaching of Eckley such that the setting is performed by a node of the computing environment initiating a socket connection with another node of the computing environment, and wherein the socket is local to the initiating node. One of ordinary skill in the art at the time of the applicant's invention would have been motivated to make such modification in order for connections to a server to be initiated from a client machine as suggested by Eckley (see lines 58 of column 8 to line 10 of column 9).

20. Referring to method claim 14, system claim 34, and computer program claim 56, Mathis teaches the setting comprises setting a size a send buffer of the socket based on at least one of

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desired amount of data streaming through the send buffer, an amount of data that can be transmitted, and a maximum buffer limit of the socket (see first two paragraphs of section 2.2).

21. Referring to method claim 15, system claim 35, and computer readable medium claim 57, Mathis teaches the setting comprises setting a size of a receive buffer of the socket such that the size does not exceed a maximum buffer limit of the socket (see 3<sup>rd</sup> paragraph of section 2.1).

22. Claims 16-19, 36-39, and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mathis in view of Braddy (U.S. Patent No. 6,304,967).

23. Referring to method claim 16, system claim 36, and computer readable medium claim 58, Mathis fails to teach the setting is performed by a node of the computing environment being connected to by another node initiating a socket connection with the node, wherein the socket is local to a node.

Braddy teaches a method and system wherein the setting is performed by a node of the computing environment being connected to by another node initiating a socket connection with the node,

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wherein the socket is local to a node (see lines 54 of column 9 to lines 8 column 10).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system and method of Mathis with the teachings of Brady such that the setting is performed by a node of the computing environment being connected to by another node initiating a socket connection with the node, wherein the socket is local to a node. One of ordinary skill in the art would have been motivated to make such modification in order to provide a central location to distribute, monitor and manage information requests as suggested by Braddy (see lines 18-35 of column 6).

24. Referring to method claim 17, system claim 37, and computer readable medium claim 59, Mathis discloses the size of the send buffer socket is based on a number of remote sockets to be opened (see paragraph 2 of section 1.3).

25. Referring to method claims 18 and 19, system claims 38 and 39, and computer readable medium claims 60 and 61, Mathis teaches the send and receive buffer of the socket based on the maximum buffer limit of the socket and the amount of data that

can be received, respectively (see paragraph 3 of section 2.1 and paragraphs 1 and 2 of section 2.3).

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made. Applicant must also show how the amendments avoid such references and objections. See 37 CFR § 1.111(c).

The following references are cited to further show the state of the art as it pertains to sockets and network configurations:

U.S. Patent No. 6,539,427 to Matarajan et al.

U.S. Patent No. 6,336,152 to Richman et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J Sorrell whose telephone number is 703 305-7800. The examiner can normally be reached on Monday-Friday 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Gaffin can be reached on 703 308-3301. The fax phone number for the

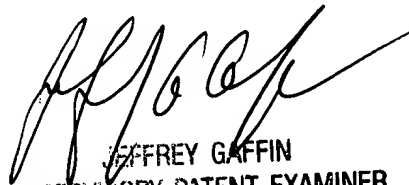
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organization where this application or proceeding is assigned is  
(703) 872-9306.

Any inquiry of a general nature or relating to the status  
of this application or proceeding should be directed to the  
receptionist whose telephone number is 703 305-3900.

EJS

October 15, 2003



JEFFREY GAFFIN  
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